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A survey conducted at the end of the presentation showed that 76% of participants agreed and 24% strongly agreed that the workshop would enhance their ability to process specimens suspected of mycotoxigenic fungal contamination. 54% of participants agreed and 38% strongly agreed that web conferencing was an appropriate presentation medium for this type of workshop and 64% agreed and 20% strongly agreed that they would recommend that colleagues view the web recording. 62% of participants agreed and 31% strongly agreed that they would attend additional diagnostic workshops presented using web-conferencing.

Diagnostic Tip of the Month: Diagnostic Lab Floor Plan and Lab Organization

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Four years ago, we moved into a new building designed to house Plant Diagnostic Services and the Soil Testing Lab. If you should have the good fortune to be planning a move in the near future, some of our room arrangements and attempts at lab organization may be helpful as you consider your future lab arrangement.

Our diagnostic section of

the building includes the Plant Diagnostic Lab, the Soil Nematode Analysis Lab, and the Entomology Lab, along with offices, storage room, and break area (Figure 1). Comments below pertain mostly to the Plant Diagnostic Lab portion of our Diagnostic Services.

The Plant Diagnostic Lab consists of two large rooms: the Plant Examination Room and the Diagnostic Procedures Room. Smaller rooms open off both of the larger lab rooms.

In the Plant Exam Room, samples are examined on one central bench and microscopy is done on the second central bench. This is a general work area that is shared with entomology studies and special projects such as soybean rust.

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Diagnostic Tip of the Month

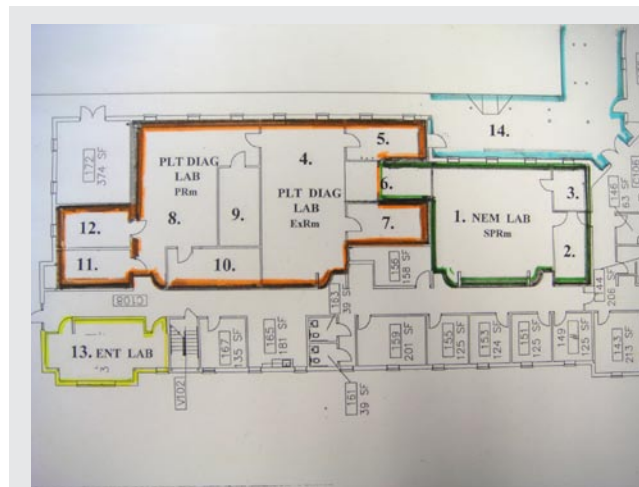


Figure 1. Architect Drawing of the Plant Diagnostic Lab Unit, Soil Nematode Analysis Lab, and Entomology Lab.

Key for Diagram

- | | |
|------------------------------------|-----------------------------------------|
| 1. Soil Nematode Analysis Lab | 8. Plant Diagnostic Lab, Procedure Room |
| 2. Nematode Receiving Room | 9. DNA/RT-PCR Room |
| 3. Nematode Microscopy Room | 10. Media Prep/Autoclave Room |
| 4. Plant Diagnostic Lab, Exam Room | 11. Culture Isolation Room |
| 5. Plant Diagnostic Receiving Room | 12. Incubator/Refrigerator Room |
| 6. Cold Storage Room | 13. Entomology Lab |
| 7. Photographic Room | 14. Loading Dock |

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Rooms that open off the Plant Exam Room are: the Plant Receiving Room, the Cold Storage Room, and

the Photographic Room.

At lunch time, the exterior door to the Receiving Room (which opens onto the Loading Dock) is left open for client sample drop off. The door connecting the Receiving Room with the rest of the lab is locked at lunch.

The Cold Room is located between the Plant Exam Room and the Soil Nematode Lab so plant and soil samples can be easily moved into cold storage (Figure 1, #6).



Figure 3. One side of the RT-PCR Room showing Cepheid RT-PCR System and Captair Bio by Erlab hood for DNA work.

In the Diagnostic Lab Procedure Room, we have our ELISA work area, our bacterial identification GC area, and our DNA extraction hood and work area. This room contains two central benches.

One is used partially for ELISA work. The other bench is a chemistry type bench where some of the bacterial GC work and DNA extraction work is done. The four smaller rooms

that open off the Procedure Room are: the DNA/RT-PCR Room, the Media Prep/Autoclave Room, the Culture Isolation Room, and the Incubator/Freezer Room.



Figure 2. Shelves on one side of the Cold Storage Room.

Arrangements we are especially pleased with include: (1) The Cold Room location organized with shelves on each side of the rectangular room. Labeled baskets help keep our plant samples easy to find (Figure 2).

(2) The separate room for DNA/RT-PCR work (Figure 3). (3) A separate room for incubators, freezer, and refrigerator with closed door keeps the noise level down in the large lab Procedures Room. (4) Keeping the Receiving Rooms (Plant Diagnostic Lab and Soil Nematode Analysis Lab) open during lunch with the main labs locked has worked out well for our clients and for us.

Arrangements we would change include: (1) Locating the biological safety cabinet near the Plant Exam Room and the Plant Receiving Room. Having the unit located in the Entomology Lab is somewhat of an accident but it is a workable situation. (2) If possible, purchase benches that have built-in electrical outlets. We had to buy power strips for our centrally placed lab benches.